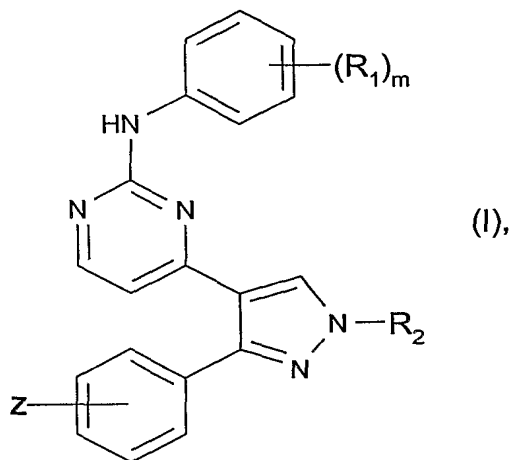


What is claimed is:

1. A compound of formula I



wherein

m is from 1 to 5;

R_1 is lower alkyl-sulfonyl; unsubstituted, mono- or di-substituted amino-sulfonyl; unsubstituted, mono- or di-substituted amino; a heterocyclic radical; lower alkyl substituted by amino, mono- or di-lower alkyl substituted amino, a heterocyclic radical, heterocyclyl-NH- or heterocyclyl-O- wherein heterocyclyl is bound to NH or O via a carbon ring atom; a radical R_4 -lower alkyl-X-, wherein R_4 is hydrogen, halogen, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical, and X is -S- or -O-; or a radical R_5 -C(=O)-, wherein R_5 is hydrogen, unsubstituted or substituted lower alkyl, free or etherified hydroxy, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; wherein the R_1 substituents are selected independently of one another if $m > 1$;

or two vicinal R_1 substituents together with the phenyl carbon atoms to which they are attached form a heterocyclic ring;

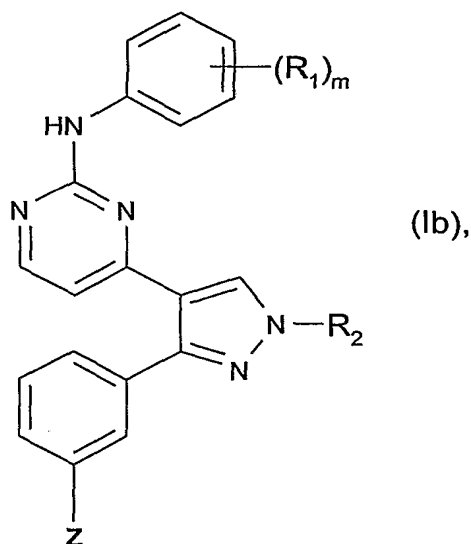
R_2 is hydrogen, unsubstituted or substituted lower alkyl or a heterocyclic radical; and

Z is benzyloxy;

or a salt of the said compounds, with the proviso that the compound {4-[3-(4-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-[4-(2-dimethylamino-ethoxy)-phenyl]-amine is excluded.

2. A compound of claim 1 of formula Ib

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wherein

m is from 1 to 5;

R₁ is lower alkyl-sulfonyl; unsubstituted, mono- or di-substituted amino-sulfonyl; unsubstituted, mono- or di-substituted amino; a heterocyclic radical; lower alkyl substituted by amino, mono- or di-lower alkyl substituted amino, a heterocyclic radical, heterocyclyl-NH- or heterocyclyl-O- wherein heterocyclyl is bound to NH or O via a carbon ring atom; a radical R₄-lower alkyl-X-, wherein R₄ is hydrogen, halogen, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical, and X is -S- or -O-; or a radical R₅-C(=O)-, wherein R₅ is hydrogen, unsubstituted or substituted lower alkyl, free or etherified hydroxy, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; wherein the R₁ substituents are selected independently of one another if m>1;

or two vicinal R₁ substituents together with the phenyl carbon atoms to which they are attached form a heterocyclic ring;

R₂ is hydrogen, unsubstituted or substituted lower alkyl or a heterocyclic radical; and Z is benzyloxy;

or a salt of the said compounds, with the proviso that the compound {4-[3-(4-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-[4-(2-dimethylamino-ethoxy)-phenyl]-amine is excluded.

3. A compound according to claims 1 or 2, in which R₁ is a heterocyclic radical; lower alkyl substituted by mono- or di-lower alkyl substituted amino, a heterocyclic radical, heterocyclyl-

NH- or heterocyclyl-O- wherein heterocyclyl is bound to NH or O via a carbon ring atom; a radical R_4 -lower alkyl-X-, wherein R_4 is mono- or di-substituted amino, or a heterocyclic radical, and X is -S- or -O-; or a radical R_5 -C(=O)-, wherein R_5 is unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; m is 1;

R₂ is hydrogen;

or a or a salt of the said compounds, with the proviso that the compound {4-[3-(4-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-[4-(2-dimethylamino-ethoxy)-phenyl]-amine is excluded.

4. A compound according to claims 1, 2 or 3, in which R₁ is a lower alkyl substituted by a di-lower alkyl substituted amino, an alkyl substituted 5- or 6- membered heterocyclyl -NH-, heterocyclyl-NH- wherein heterocyclyl is bound to NH via a carbon ring atom; a radical R_4 -lower alkyl-O-, wherein R_4 is di-substituted amino; or a radical R_5 -C(=O)-, wherein R_5 is unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; m is 1;

R₂ is hydrogen;

or a or a salt of the said compounds, with the proviso that the compound {4-[3-(4-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-[4-(2-dimethylamino-ethoxy)-phenyl]-amine is excluded.

5. A compound according to claims 1, 2, 3 or 4, in which R₁ is a lower alkyl substituted by a di-lower alkyl substituted amino, or a C₁-C₄ alkyl-substituted piperazinyl, or a pyrrolidinyl; piperidinyl wherein piperidinyl is bound to NH via a carbon ring atom; a radical R_4 -lower alkyl-O-, wherein R_4 is amino di-substituted by lower alkyl; or R_5 -C(=O)-, wherein R_5 is a C₁-C₄ alkyl-substituted piperazinyl;

m is 1;

R₂ is hydrogen;

or a or a salt of the said compounds, with the proviso that the compound {4-[3-(4-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-[4-(2-dimethylamino-ethoxy)-phenyl]-amine is excluded.

6. A compound chosen from the group consisting of;

{4-[3-(3-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-(4-pyrrolidin-1-ylmethyl-phenyl)-amine;

{4-[3-(3-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-(4-dimethyl

aminomethyl-phenyl)-amine;

(4-{4-[3-(3-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-ylamino}-phenyl)-(4-methyl-piperazin-1-yl)-methanone;

{4-[3-(3-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-yl}-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-amine;and

4-{4-[3-(3-Benzyloxy-phenyl)-1H-pyrazol-4-yl]-pyrimidin-2-ylamino}-N-(2,2,6,6-tetramethyl-piperidin-4-yl)-benzamide.

7. A compound of claim 2 wherein R_1 is lower alkyl substituted by amino, lower alkyl substituted by a heterocyclic radical or $R_5-C(O)-$.

8. A compound of claim 7 wherein R_1 is lower alkyl substituted by amino.

9. A compound of claim 7 wherein R_1 is lower alkyl substituted by a heterocyclic radical.

10. A compound of claim 9 wherein the alkyl portion is methylene and the heterocyclic radical is a five or six membered ring containing one or two nitrogens and is unsubstituted or substituted on one or more carbon atoms by a lower alkyl group.

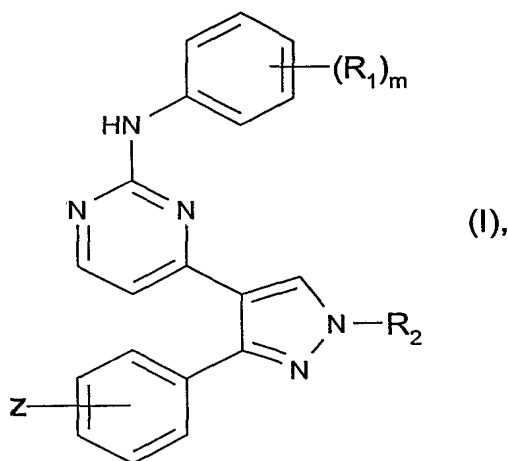
11. A compound of claim 7 wherein R_1 is $R_5-C(O)-$.

12. A compound of claim 11 wherein R_5 is substituted amino or a heterocyclic radical, wherein the heterocyclic radical is a five or six membered ring containing one or two nitrogens and is unsubstituted or substituted on one or more carbon atoms by a lower alkyl group.

13. A compound of any one of claims 7-12 wherein R_2 is H.

14. A compound of any one of claims 7-13 wherein m is 1.

15. A compound according to formula I



wherein

m is from 1 to 5;

R_1 is lower alkyl-sulfonyl; unsubstituted, mono- or di-substituted amino-sulfonyl; unsubstituted, mono- or di-substituted amino; a heterocyclic radical; lower alkyl substituted by amino, mono- or di-lower alkyl substituted amino, a heterocyclic radical, heterocyclyl-NH- or heterocyclyl-O- wherein heterocyclyl is bound to NH or O via a carbon ring atom; a radical R_4 -lower alkyl-X-, wherein R_4 is hydrogen, halogen, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical, and X is -S- or -O-; or a radical R_5 -C(=O)-, wherein R_5 is hydrogen, unsubstituted or substituted lower alkyl, free or etherified hydroxy, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; wherein the R_1 substituents are selected independently of one another if $m > 1$;

or two vicinal R_1 substituents together with the phenyl carbon atoms to which they are attached form a heterocyclic ring;

R_2 is hydrogen, unsubstituted or substituted lower alkyl or a heterocyclic radical; and

Z is benzyloxy;

or a salt of the said compounds, for medical use.

16. A compound according to claims any one of 1-14 or 15 for medical use.

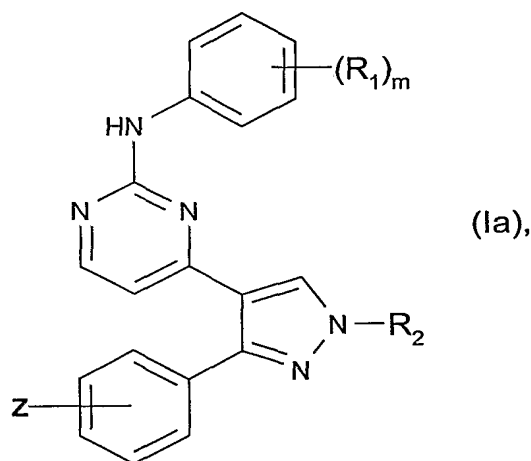
17. Use of a compound according to claims 1-14 or 15 for the manufacture of a medicament to be used in the treatment of a proliferative disease.

18. Use according to claim 17, in which the disease is chosen from the group consisting of;

tumours, for example breast, renal, prostate, colorectal, thyroid, ovarian, pancreas, neuronal, lung, uterine and gastro-intestinal tumours as well as osteosarcomas and melanomas.

19. Use of a compound according to claims 1-14 or 15 for the manufacture of a medicament to be used in the treatment of a graft vessel disease, or for preventing or treating vein graft stenosis, restenosis and/or vascular occlusion following vascular injury.

20. A method of treating a disease which responds to inhibition of IGF-1R in a mammal, which comprises administering to the mammal an effective IGF-1R inhibiting amount of a compound of formula Ia



wherein

m is from 1 to 5;

R₁ is lower alkyl-sulfonyl; unsubstituted, mono- or di-substituted amino-sulfonyl;

unsubstituted, mono- or di-substituted amino; a heterocyclic radical; lower alkyl substituted by amino, mono- or di-lower alkyl substituted amino, a heterocyclic radical, heterocyclyl-NH- or heterocyclyl-O- wherein heterocyclyl is bound to NH or O via a carbon ring atom; a radical R₄-lower alkyl-X-, wherein R₄ is hydrogen, halogen, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical, and X is -S- or -O-; or a radical R₅-C(=O)-, wherein R₅ is hydrogen, unsubstituted or substituted lower alkyl, free or etherified hydroxy, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; wherein the R₁ substituents are selected independently of one another if m>1;

or two vicinal R₁ substituents together with the phenyl carbon atoms to which they are attached form a heterocyclic ring;

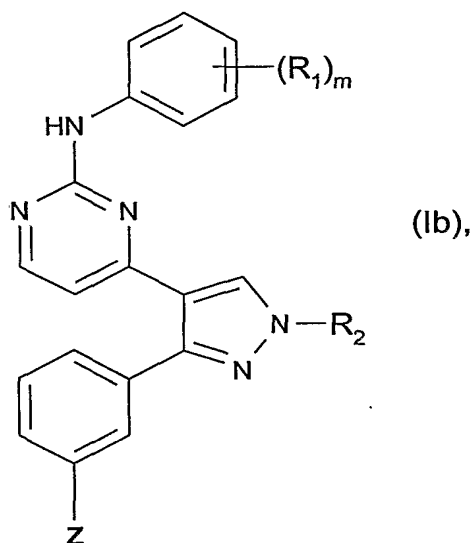
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R_2 is hydrogen, unsubstituted or substituted lower alkyl or a heterocyclic radical; and

Z is benzyloxy;

or a pharmaceutically acceptable salt thereof.

21. A method of claim 20, which comprises administering to the mammal an effective IGF-1R inhibiting amount of a compound of formula Ib



wherein

m is from 1 to 5;

R_1 is lower alkyl-sulfonyl; unsubstituted, mono- or di-substituted amino-sulfonyl; unsubstituted, mono- or di-substituted amino; a heterocyclic radical; lower alkyl substituted by amino, mono- or di-lower alkyl substituted amino, a heterocyclic radical, heterocyclyl-NH- or heterocyclyl-O- wherein heterocyclyl is bound to NH or O via a carbon ring atom; a radical R_4 -lower alkyl-X-, wherein R_4 is hydrogen, halogen, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical, and X is a -S- or -O-; or a radical R_5 -C(=O)-, wherein R_5 is hydrogen, unsubstituted or substituted lower alkyl, free or etherified hydroxy, unsubstituted, mono- or di-substituted amino, or a heterocyclic radical; wherein the R_1 substituents are selected independently of one another if $m > 1$;

or two vicinal R_1 substituents together with the phenyl carbon atoms to which they are attached form a heterocyclic ring;

R_2 is hydrogen, unsubstituted or substituted lower alkyl or a heterocyclic radical; and

Z is benzyloxy;

or a pharmaceutically acceptable salt thereof.

22. Use of a compound according to any one of claims 1-14 or 15 for the preparation of a pharmaceutical composition for the therapeutic and/or prophylactic management of a disease that responds to inhibition of IGF-1R.

23. A pharmaceutical composition which comprises a pharmaceutically effective amount of a compound of any one of claims 1-14 or 15 and a pharmaceutically acceptable carrier.

24. A pharmaceutical composition which comprises a pharmaceutically effective amount of a compound of any one of claims 1-14 or 15, together with inhibitors of the enzymes of polyamine synthesis, inhibitors of protein kinase C, inhibitors of other tyrosine kinases, cytokines, negative growth regulators, for example TGF- β or IFN- β , aromatase inhibitors, antioestrogens and/or cytostatic drugs; and a pharmaceutically acceptable carrier.